

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Cancelled)

2. (Currently Amended) An image processing device, comprising:

a region extraction unit for separating and extracting a character region, a graphic region and a photograph region from image data;

a region compression unit for performing a compression process for the image data in each region extracted by said region extraction unit;

a region synthesis unit for synthesizing the image data of the regions compressed by said region compression unit;

a display; and

a compression process mode setting unit, said compression process mode setting unit displays a plurality of compression process modes on the display, enabling a user to select one of the plurality of compression process modes; and

a compression method selection unit for selecting from a plurality of compression modes, one of the plurality of compression methods for each region for the compression process to be performed for each region, wherein the selection unit displays one or more compression methods on the display for each region, enabling a user to select one of the plurality of compression methods in accordance with a type of the region from the plurality of compression methods, and wherein for each

type of region, the selection unit displays only compression methods from compression methods in plurality of compression methods that are designated for the type of region;

said region compression unit using, when a speed preference mode is set at said compression process mode setting unit, one of a plurality of compression methods designated for the image data in each region which exhibits a highest processing speed to perform the compression process for the individual region, wherein, for each type of region, the designated compression method is selected from among a plurality of compression methods, wherein each of the plurality of compression methods is designated for the type of region, and

said region compression unit performing the compression process for the image data of each region using the compression method selected for the region by said compression method selection unit.

3. (Currently Amended) An image processing device, comprising:
 - a region extraction unit for separating and extracting a character region, a graphic region and a photograph region from image data;
 - a region compression unit for performing a compression process for the image data in each region extracted by said region extraction unit;
 - a region synthesis unit for synthesizing the image data of the regions compressed by said region compression unit;
 - a display; and

a compression process mode setting unit, said compression process mode setting unit displays a plurality of compression process modes on the display, enabling a user to select one of the plurality of compression process modes; and
a compression method selection unit for selecting from a plurality of compression modes, one of the plurality of compression methods for each region for the compression process to be performed for each region, wherein the selection unit displays one or more compression methods on the display for each region, enabling a user to select one of the plurality of compression methods in accordance with a type of the region from the plurality of compression methods, and wherein for each type of region, the selection unit displays only compression methods from compression methods in plurality of compression methods that are designated for the type of region;

said region compression unit using, when a picture quality preference mode is set at said compression process mode setting unit, one of a plurality of compression methods designated for the image data in each region which exhibits a least picture quality deterioration to perform the compression process for the individual region, wherein, for each type of region, the designated compression method is selected from among a plurality of compression methods, wherein each of the plurality of compression methods is designated for the type of region; and

said region compression unit performing the compression process for the image data of each region using the compression method selected for the region by said compression method selection unit.

4. (Currently Amended) An image processing device, comprising:

a region extraction unit for separating and extracting a character region, a graphic region and a photograph region from image data;

a region compression unit for performing a compression process for the image data in each region extracted by said region extraction unit;

a region synthesis unit for synthesizing the image data of the regions compressed by said region compression unit;

a display; and

a compression process mode setting unit, said compression process mode setting unit displays a plurality of compression process modes on the display, enabling a user to select one of the plurality of compression process modes; and

a compression method selection unit for selecting from a plurality of compression modes, one of the plurality of compression methods for each region for the compression process to be performed for each region, wherein the selection unit displays one or more compression methods on the display for each region, enabling a user to select one of the plurality of compression methods in accordance with a type of the region from the plurality of compression methods, and wherein for each type of region, the selection unit displays only compression methods from compression methods in plurality of compression methods that are designated for the type of region;

said region compression unit using, when a size preference mode is set at said compression process mode setting unit, one of a plurality of compression methods designated for the image data in each region which exhibits a highest compression ratio to perform the compression process for the individual region, wherein, for each type of region, the designated compression method is selected

from among a plurality of compression methods, wherein each of the plurality of compression methods is designated for the type of region; and

said region compression unit performing the compression process for the image data of each region using the compression method selected for the region by said compression method selection unit.

5. (Currently Amended) An image processing device, comprising:

- a region extraction unit for separating and extracting a character region, a graphic region and a photograph region from image data;
- a region compression unit for performing a compression process for the image data in each region extracted by said region extraction unit;
- a region synthesis unit for synthesizing the image data of the regions compressed by said region compression unit;
- a display; and
- a compression process mode setting unit, said compression process mode setting unit displays a plurality of compression process modes on the display, enabling a user to select one of the plurality of compression process modes;

a compression method selection unit for selecting from a plurality of compression modes, one of the plurality of compression methods for each region for the compression process to be performed for each region, wherein the selection unit displays one or more compression methods on the display for each region, enabling a user to select one of the plurality of compression methods in accordance with a type of the region from the plurality of compression methods, and wherein for each type of region, the selection unit displays only compression methods from

compression methods in plurality of compression methods that are designated for the type of region;

said region compression unit using, when a speed preference mode is set at said compression process mode setting unit, one of a plurality of compression methods designated for the image data in each region which exhibits a highest processing speed to perform the compression process for the individual region, wherein, for each type of region, the designated compression method is selected from among the plurality of compression methods, wherein each of the plurality of compression methods is designated for the type of region,

said region compression unit using, when a picture quality preference mode is set at said compression process mode setting unit, one of the plurality of compression methods designated for the image data in each region which exhibits a least picture quality deterioration to perform the compression process for the individual region, wherein, for each type of region, the designated compression method is selected from among the plurality of compression methods, wherein each of the plurality of compression methods is designated for the type of region, and

said region compression unit using, when a size preference mode is set at said compression process mode setting unit, one of the plurality of compression methods designated for the image data in each region which exhibits a highest compression ratio to perform the compression process for the individual region, wherein, for each type of region, the designated compression method is selected from among the plurality of compression methods, wherein each of the plurality of compression methods is designated for the type of region; and

said region compression unit performing the compression process for the image data of each region using the compression method selected for the region by said compression method selection unit.

6. - 7. (Cancelled)

8. (Currently Amended) An image processing method, comprising:

a region extraction step of separating and extracting by a regional extracting component or processor, a character region, a graphic region and a photograph region from image data;

a region compression step for performing by a compressing component or processor, a compression process for image data in each region extracted by said region extraction step;

a region synthesis step for synthesizing the image data of the regions compressed by said region compression step;

a compression process mode displaying step for displaying a plurality of compression process modes on a display; and

a compression method displaying step for displaying a plurality of compression methods for each region extracted by said region extraction step, the compression method displaying step displaying only compression methods in the plurality of compression methods that are designated for the type of region, and enabling a user to select one of the displayed plurality of compression methods in accordance with a type of the region;

a compression process mode setting step of setting a compression process mode if one of the displayed plurality of compression process modes is selected;

and

a compression method setting step of setting a compression method for each region if one of the displayed plurality of compression methods is selected;

said region compression step using, when a speed preference mode is set by said compression process mode setting step, one of a plurality of compression methods designated for the image data in each region which exhibits a highest processing speed to perform the compression process for the individual region, wherein, for each type of region, the designated compression method is selected from among a plurality of compression methods, wherein each of the plurality of compression methods is designated for the type of region; and

said region compression step performing the compression process for the image data of each region using the compression method selected for the region by said compression method setting step.

9. (Currently Amended) An image processing method, comprising:

a region extraction step of separating and extracting by a regional extracting component or processor, a character region, a graphic region and a photograph region from image data;

a region compression step for performing by a compressing component or processor a compression process for image data in each region extracted by said region extraction step;

a region synthesis step for synthesizing the image data of the regions compressed by said region compression step;

a compression process mode displaying step for displaying a plurality of compression process modes on a display; and

a compression method displaying step for displaying a plurality of compression methods for each region extracted by said region extraction step, the compression method displaying step displaying only compression methods in the plurality of compression methods that are designated for the type of region, and enabling a user to select one of the displayed plurality of compression methods in accordance with a type of the region;

a compression process mode setting step of setting a compression process mode if one of the displayed plurality of compression process methods on the displayed is selected; and

a compression method setting step of setting a compression method for each region if one of the displayed plurality of compression methods is selected;

said region compression step using, when a picture quality mode is set by said compression process mode setting step, one of a plurality of compression methods designated for the image data in each region which exhibits a least picture quality deterioration to perform the compression process for the individual region, wherein, for each type of region, the designated compression method is selected from among a plurality of compression methods, wherein each of the plurality of compression methods is designated for the type of region;

said region compression step performing the compression process for the image data of each region using the compression method selected for the region by said compression method setting step.

10. (Cancelled)

11. (Currently Amended) An image processing method, comprising:

a region extraction step of separating and extracting by a regional extracting component or processor, a character region, a graphic region and a photograph region from image data;

a region compression step for performing by a regional compressing component or processor, a compression process for image data in each region extracted by said region extraction step;

a region synthesis step for synthesizing the image data of the regions compressed by said region compression step;

a compression process mode displaying step for displaying a plurality of compression process modes on a display; and

a compression method displaying step for displaying a plurality of compression methods for each region extracted by said region extraction step, the compression method displaying step displaying only compression methods in the plurality of compression methods that are designated for the type of region, and enabling a user to select one of the displayed plurality of compression methods in accordance with a type of the region;

a compression process mode setting step of setting a compression processing mode; if one of the displayed plurality of compression process methods on the displayed is selected; and

a compression method setting step of setting a compression method for each region if one of the displayed plurality of compression methods is selected;

said region compression step using, when a speed preference mode is set by said compression process mode setting step, one of a plurality of compression methods designated for the image data in each region which exhibits a highest processing speed to perform the compression process for the individual region, wherein, for each type of region, the designated compression method is selected from among a plurality of compression methods, wherein each of the plurality of compression methods is designated for the type of region,

said region compression step using, when a picture quality mode is set by said compression process mode setting step, one of the plurality of compression methods designated for the image data in each region which exhibits a least picture quality deterioration to perform the compression process for the individual region, wherein, for each type of region, the designated compression method is selected from among a plurality of compression methods, wherein each of the plurality of compression methods is designated for the type of region, ~~and~~

said region compression step using, when a size preference mode is set by said compression process mode setting step, one of the plurality of compression methods designated for the image data in each region which exhibits a highest compression ratio to perform the compression process for the individual region, wherein, for each type of region, the designated compression method is selected

from among a plurality of compression methods, wherein each of the plurality of compression methods is designated for the type of region; and

said region compression step performing the compression process for the image data of each region using the compression method selected for the region by said compression method setting step.

12. (Cancelled)

13. (Currently Amended) A computer-readable medium encoded with computer-readable instructions to cause an image processing device to execute:

a region extraction step of separating and extracting a character region, a graphic region and a photograph region from image data;

a region compression step for performing a compression process for the image data in each region extracted by said region extraction step;

a region synthesis step for synthesizing the image data of the regions compressed by said region compression step;

a compression process mode displaying step for displaying a plurality of compression process modes; and

a compression method displaying step for displaying a plurality of compression methods for each region extracted by said region extraction step, the compression method displaying step displaying only compression methods in the plurality of compression methods that are designated for the type of region, and enabling a user to select one of the displayed plurality of compression methods in accordance with a type of the region;

a compression process mode setting step of setting a compression process mode; if one of the displayed plurality of compression process methods on the displayed is selected; and

a compression method setting step of setting a compression method for each region if one of the displayed plurality of compression methods is selected;

said region compression step using, when a speed preference mode is set by said compression process mode setting step, one of a plurality of compression methods designated for the image data in each region which exhibits a highest processing speed to perform the compression process for the individual region, wherein, for each type of region, the designated compression method is selected from among a plurality of compression methods, wherein each of the plurality of compression methods is designated for the type of region; and

said region compression step performing the compression process for the image data of each region using the compression method selected for the region by said compression method setting step.

14. (Currently Amended) A computer-readable medium encoded with computer-readable instructions to cause an image processing device to execute:

a region extraction step of separating and extracting a character region, a graphic region and a photograph region from image data;

a region compression step for performing a compression process for the image data in each region extracted by said region extraction step;

a region synthesis step for synthesizing the image data of the regions compressed by said region compression step;

a compression process mode displaying step for displaying a plurality of compression process modes; and

a compression method displaying step for displaying a plurality of compression methods for each region extracted by said region extraction step, the compression method displaying step displaying only compression methods in the plurality of compression methods that are designated for the type of region, and enabling a user to select one of the displayed plurality of compression methods in accordance with a type of the region;

a compression process mode setting step of setting compression process mode; if one of the displayed plurality of compression process methods on the displayed is selected; and

a compression method setting step of setting a compression method for each region if one of the displayed plurality of compression methods is selected;

said region compression step using, when a picture quality mode is set by said compression process mode setting step, one of a plurality of compression methods designated for the image data in each region which exhibits a least picture quality deterioration to perform the compression process for the individual region, wherein, for each type of region, the designated compression method is selected from among a plurality of compression methods, wherein each of the plurality of compression methods is designated for the type of region; and

said region compression step performing the compression process for the image data of each region using the compression method selected for the region by said compression method setting step.

15. (Currently Amended) A computer-readable medium encoded with computer-readable instructions to cause an image processing device to execute:

a region extraction step of separating and extracting a character region, a graphic region and a photograph region from image data;

a region compression step for performing a compression process for the image data in each region extracted by said region extraction step;

a region synthesis step for synthesizing the image data of the regions compressed by said region compression step;

a compression process mode displaying step for displaying a plurality of compression process modes; and

a compression method displaying step for displaying a plurality of compression methods for each region extracted by said region extraction step, the compression method displaying step displaying only compression methods in the plurality of compression methods that are designated for the type of region, and enabling a user to select one of the displayed plurality of compression methods in accordance with a type of the region;

a compression process mode setting step of setting a compression process mode; if one of the displayed plurality of compression process methods on the displayed is selected; and

a compression method setting step of setting a compression method for each region if one of the displayed plurality of compression methods is selected;

said region compression step using, when a size preference mode is set by said compression process mode setting step, one of a plurality of compression methods designated for the image data in each region which exhibits a highest compression ratio to perform the compression process for the individual region, wherein, for each type of region, the designated compression method is selected from among a plurality of compression methods, wherein each of the plurality of compression methods is designated for the type of region; and

said region compression step performing the compression process for the image data of each region using the compression method selected for the region by said compression method setting step.

16. (Currently Amended) A computer-readable medium encoded with computer-readable instructions to cause an image processing device to execute:

a region extraction step of separating and extracting a character region, a graphic region and a photograph region from image data;

a region compression step for performing a compression process for the image data in each region extracted by said region extraction step;

a region synthesis step for synthesizing the image data of the regions compressed by said region compression step;

a compression process mode displaying step for displaying a plurality of compression process modes; and

a compression method displaying step for displaying a plurality of compression methods for each region extracted by said region extraction step, the compression method displaying step displaying only compression methods in the plurality of compression methods that are designated for the type of region, and enabling a user to select one of the displayed plurality of compression methods in accordance with a type of the region;

a compression process mode setting step of setting a compression processing mode; if one of the displayed plurality of compression process methods on the displayed is selected; and

a compression method setting step of setting a compression method for each region if one of the displayed plurality of compression methods is selected;

said region compression step using, when a speed preference mode is set by said compression process mode setting step, one of a plurality of compression methods designated for the image data in each region which exhibits the highest processing speed to perform the compression process for the individual region, wherein, for each type of region, the designated compression method is selected from among a plurality of compression methods, wherein each of the plurality of compression methods is designated for the type of region,

said region compression step using, when a picture quality mode is set by said compression process mode setting step, one of the plurality of compression methods designated for the image data in each region which exhibits the least picture quality deterioration to perform the compression process for the individual region, wherein, for each type of region, the designated compression method is

selected from among a plurality of compression methods, wherein each of the plurality of compression methods is designated for the type of region, and
said region compression step using, when a size preference mode is set by said compression process mode setting step, one of the plurality of compression methods designated for the image data in each region which exhibits the highest compression ratio to perform the compression process for the individual region, wherein, for each type of region, the designated compression method is selected from among a plurality of compression methods, wherein each of the plurality of compression methods is designated for the type of region; and

said region compression step performing the compression process for the image data of each region using the compression method selected for the region by said compression method setting step.

17 - 40. (Canceled)